SYSTEM AND METHOD FOR COOPERATIVE DATABASE ACCELERATION
Cary Jardin
Appl. No.: unknown   Atty Docket: XP.001CP1

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FIG. 1

SYSTEM AND METHOD FOR COOPERATIVE DATABASE ACCELERATION
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FIG. 2

SYSTEM AND METHOD FOR COOPERATIVE DATABASE ACCELERATION
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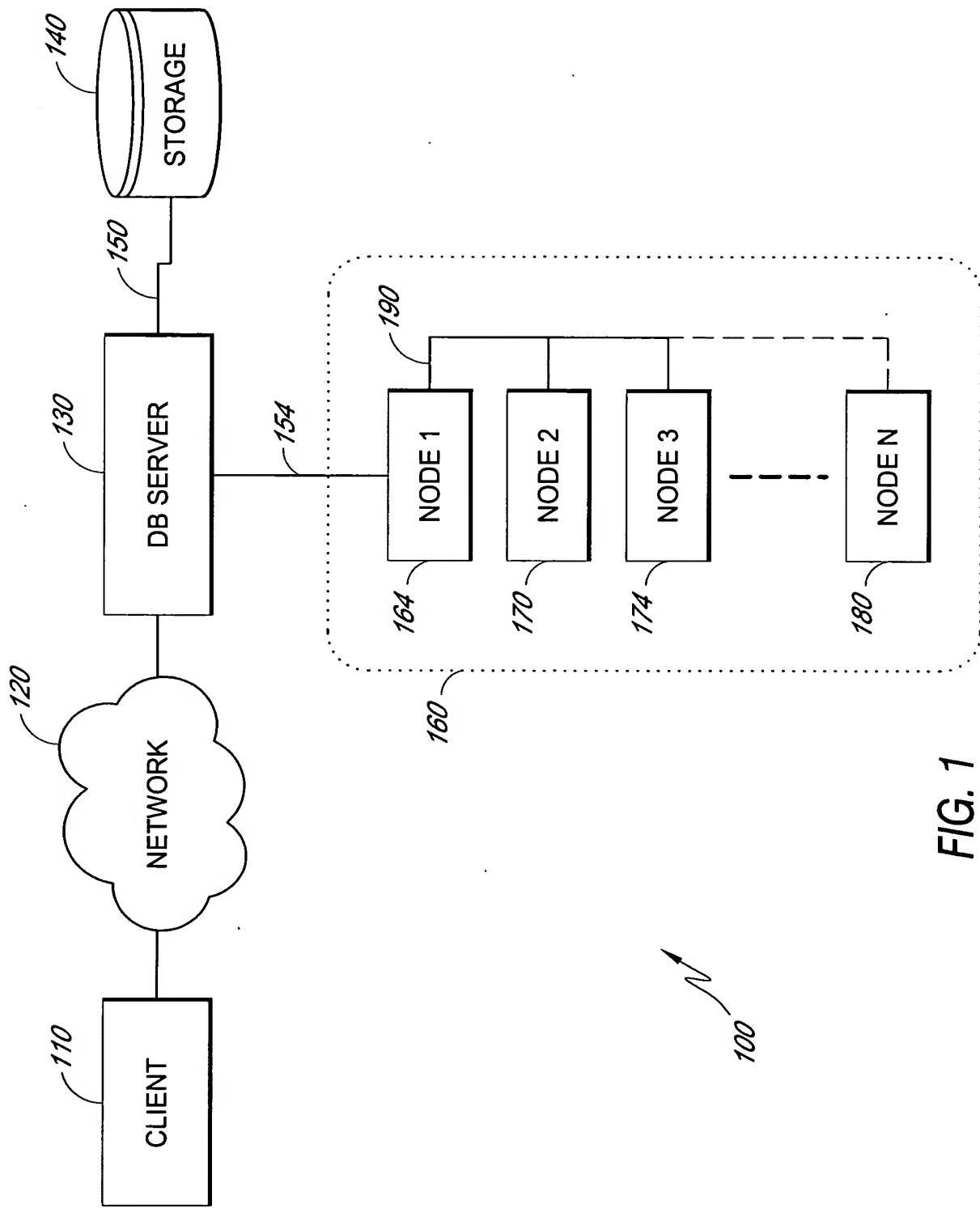Appl. No.: unknown   Atty Docket: XP.001CP1

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FIG. 3

SYSTEM AND METHOD FOR COOPERATIVE DATABASE ACCELERATION
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400

START *410*

PROCESS
DATABASE
COMMAND *420*

READ
OR WRITE
COMMAND
? *430*

READ

WRITE

PROCESS
READ
COMMAND *450*

440 PROCESS
WRITE
COMMAND

END *490*

FIG. 4

SYSTEM AND METHOD FOR COOPERATIVE DATABASE ACCELERATION
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FIG. 5

SYSTEM AND METHOD FOR COOPERATIVE DATABASE ACCELERATION
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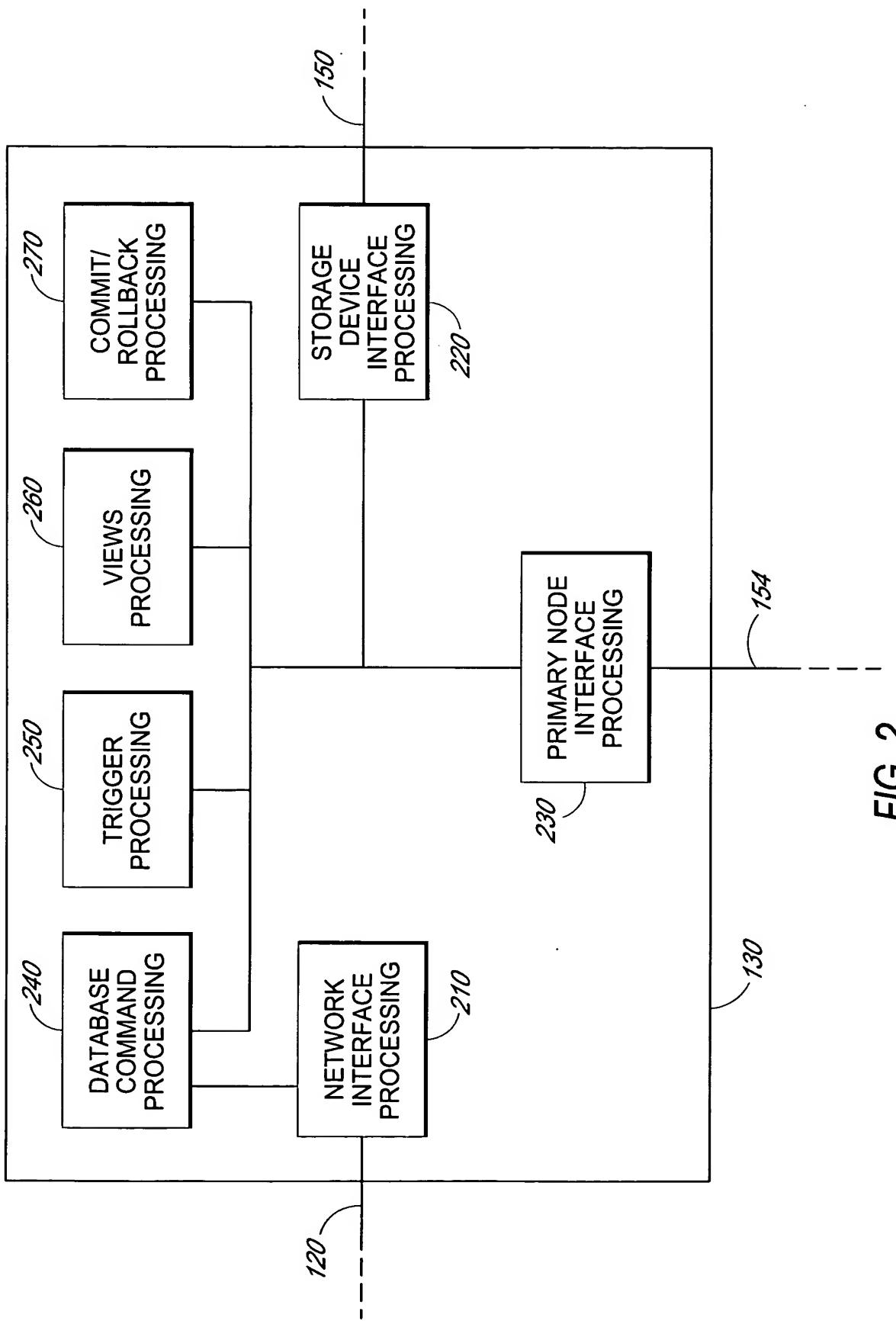Appl. No.: unknown   Atty Docket: XP.001CP1

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450

610
START

620
DETERMINE
LOCK STATUS

630
VOLATILE
OR PERSISTENT READ
COMMAND
?

PERSISTENT

VOLATILE

640
RETRIEVE
DATA FROM
PERSISTENT
STORAGE

650
SEND READ
COMMAND TO
VOLATILE
STORAGE

660
PROCESS
VOLATILE
STORAGE READ
COMMAND

670
SEND RESULTS
DATA TO
REQUESTER

690
END
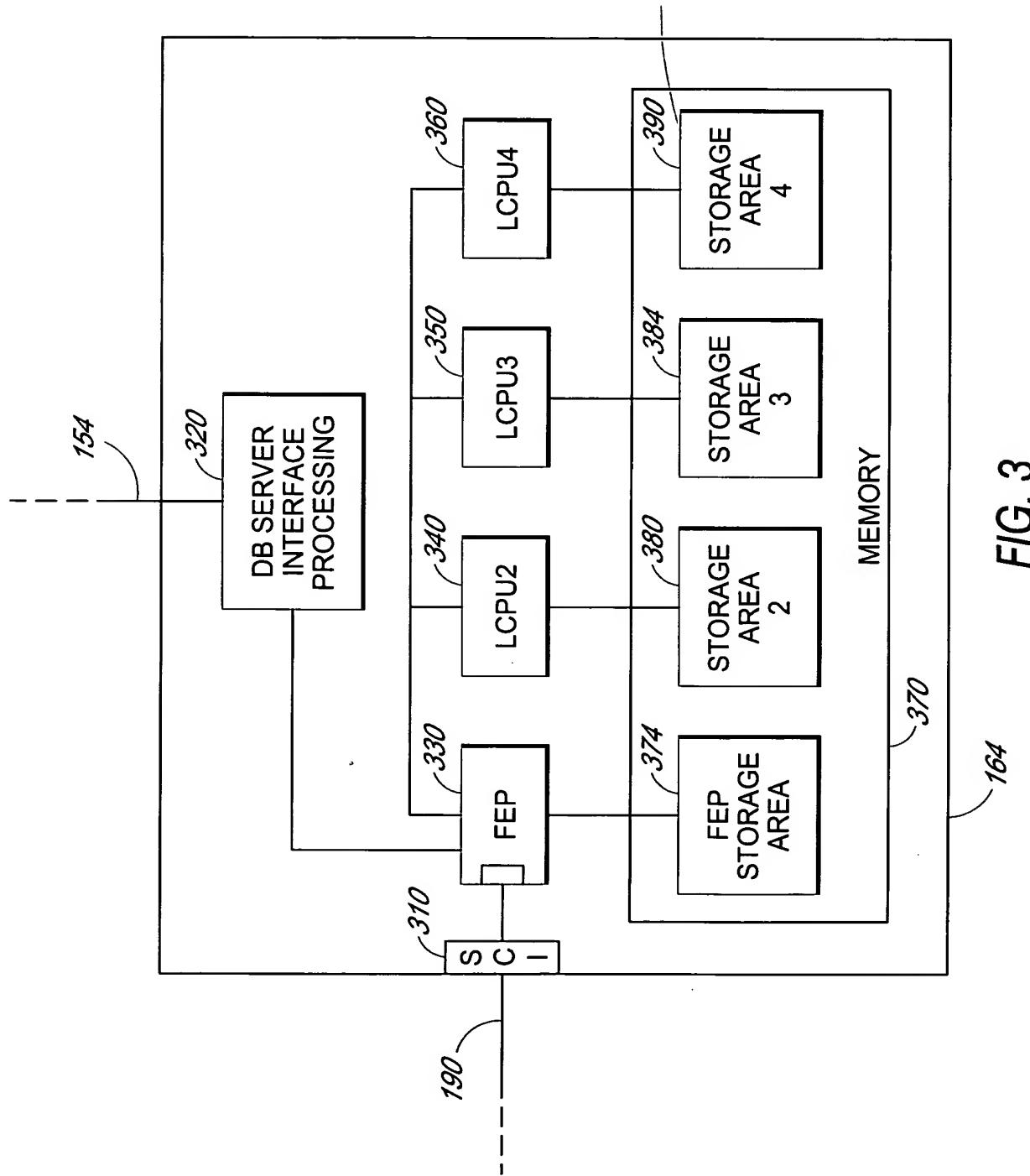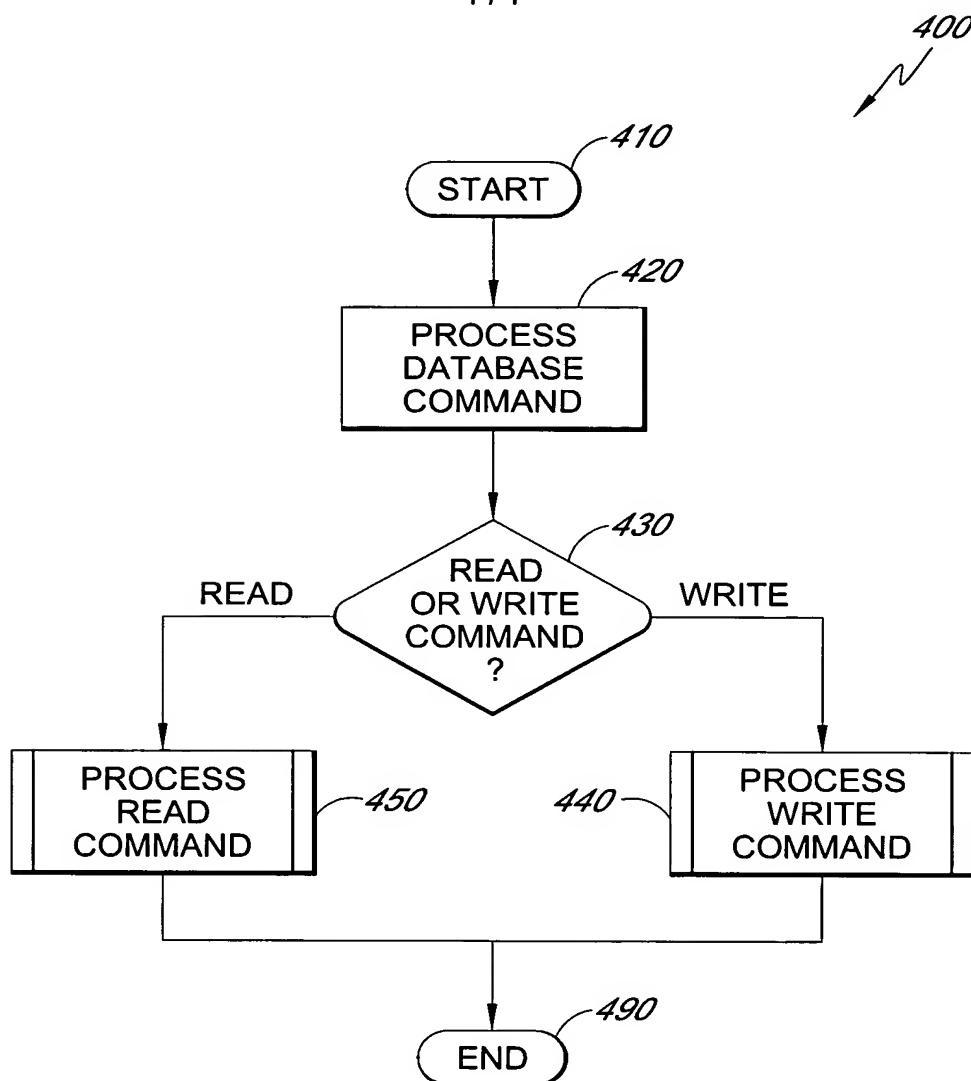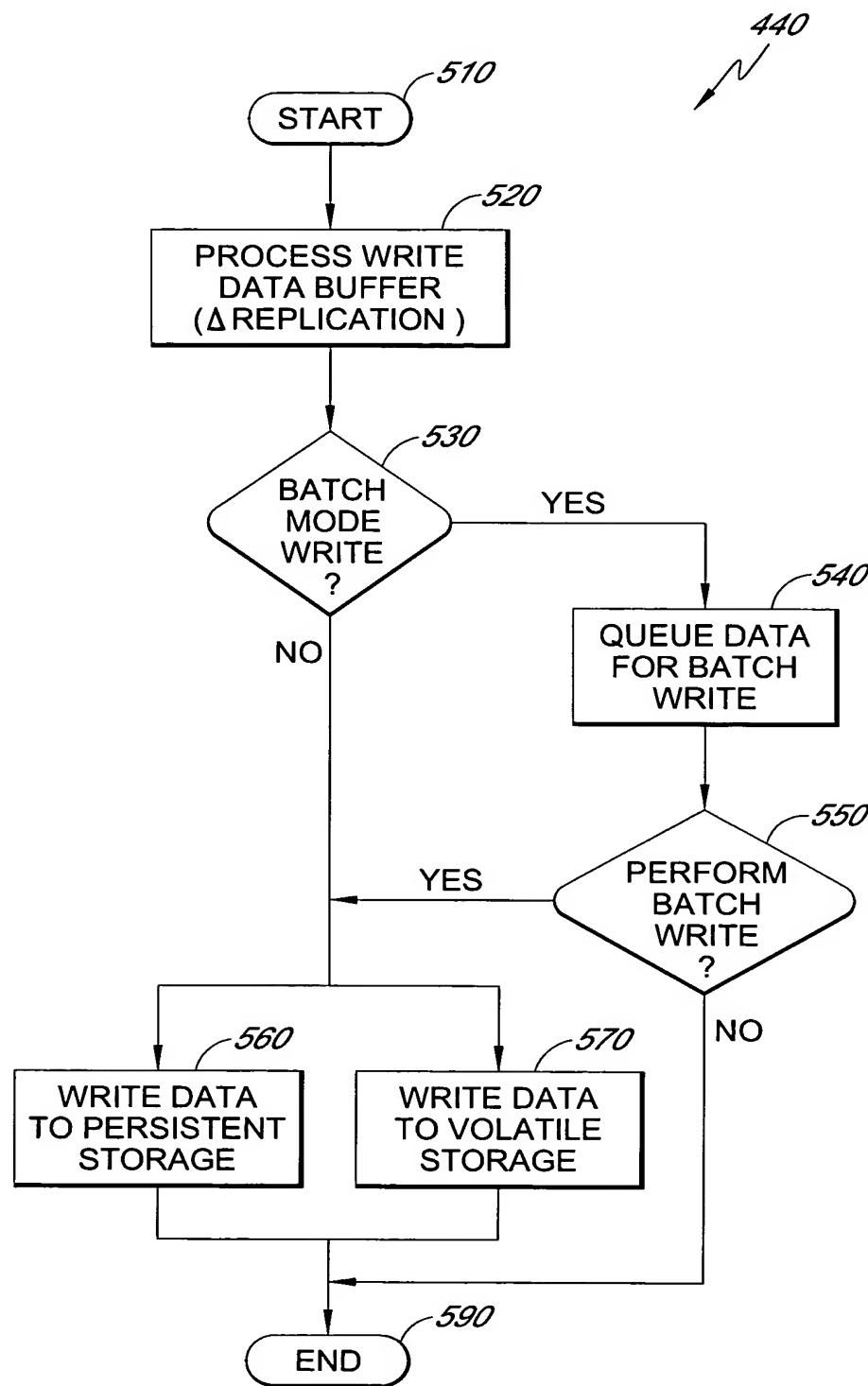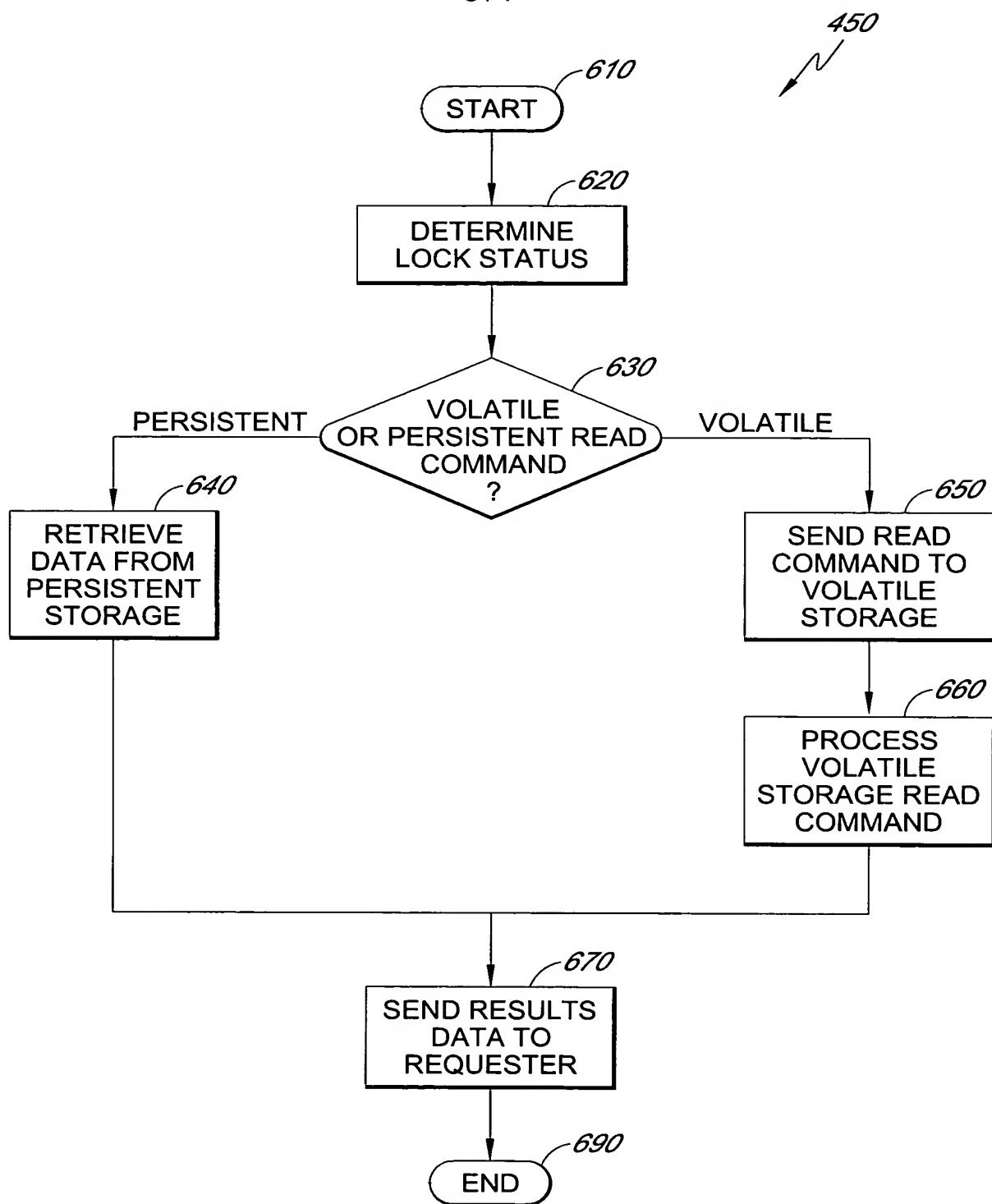
FIG. 6

SYSTEM AND METHOD FOR COOPERATIVE DATABASE ACCELERATION
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```
                    ┌──────────┐
                    │  START   │──── 710                    700
                    └──────────┘                           ⟋⟍
                         │
                         ▼
              ┌───────────────────────┐
              │   PROCESS CLIENT      │── 720
              │ TRANSACTION INITIATION│
              └───────────────────────┘
                         │
                         ▼
              ┌───────────────────────┐
              │    ISSUE LOCK ON      │── 730
              │  AFFECTED DATA AREAS  │
              └───────────────────────┘
                         │
                         ▼
              ┌───────────────────────┐
              │   PROCESS CLIENT      │── 740
              │   MODIFICATIONS       │
              │  TO AFFECTED AREA(S)  │
              └───────────────────────┘
                         │
                         ▼
              ┌───────────────────────┐
              │   MAINTAIN LIST OF    │── 750
              │   DB CHANGES FOR      │
              │   AFFECTED AREA(S)    │
              └───────────────────────┘
                         │
                         ▼
                      ╱─────╲
                     ╱COMMIT ╲── 760      ROLLBACK   ┌──────────┐
                    ╱OR ROLLBACK╲──────────────────→ │ UNDO DB  │── 764
                    ╲    ?     ╱                      │ CHANGES  │
                     ╲───────╱                        │ IN LIST  │
                         │                            └──────────┘
                      COMMIT                                │
                         │                                  │
                         ▼◄─────────────────────────────────┘
              ┌───────────────────────┐
              │     DELETE LIST       │── 770
              │   OF DB CHANGES       │
              │  FOR AFFECTED AREA(S) │
              └───────────────────────┘
                         │
                         ▼
              ┌───────────────────────┐
              │   RELEASE LOCK ON     │── 780
              │ AFFECTED DATA AREA(S) │
              └───────────────────────┘
                         │
                         ▼
                    ┌──────────┐
                    │   END    │── 790
                    └──────────┘
```
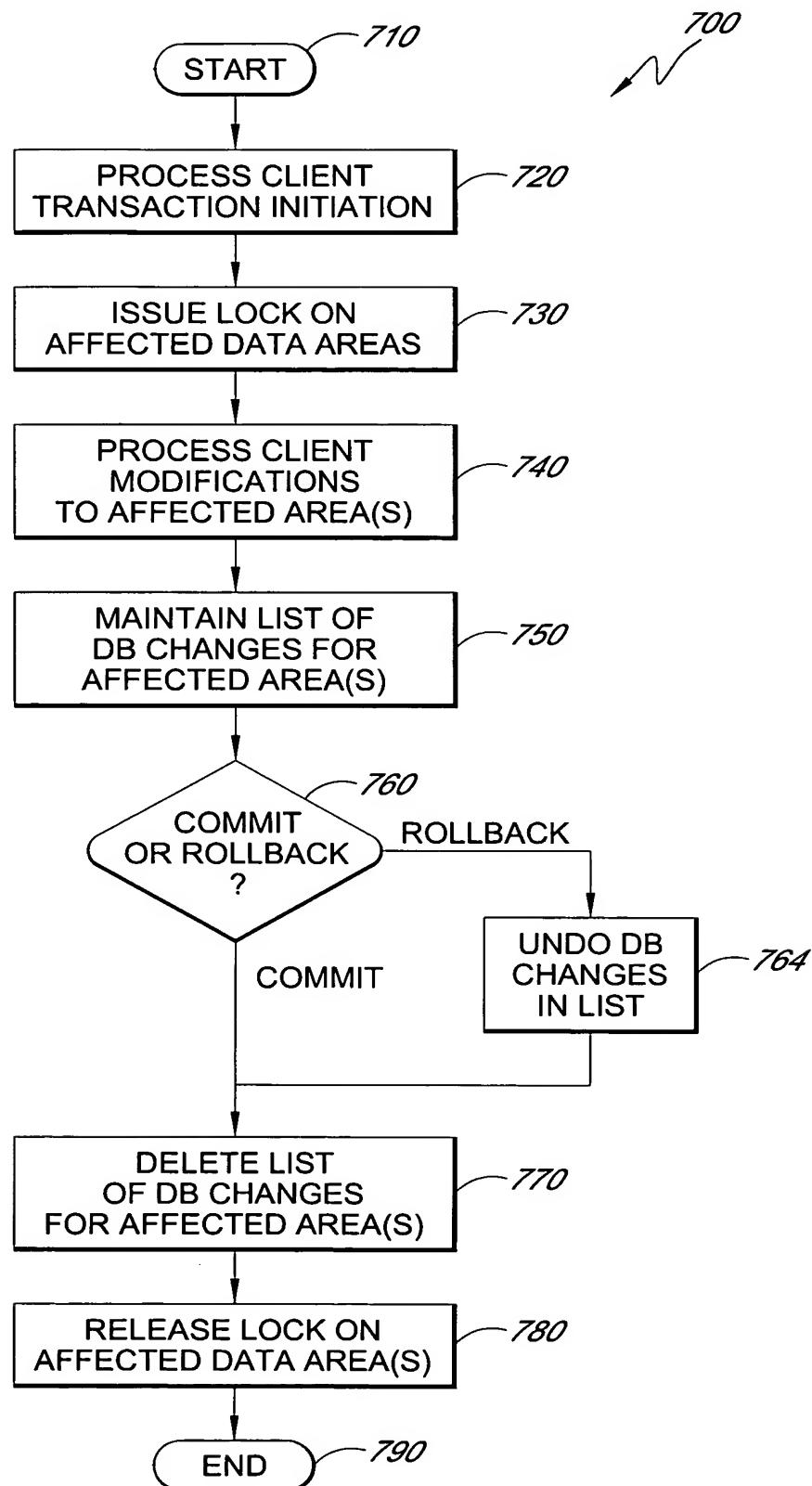
FIG. 7